Bacteria Webquest! \*\*\*Don’t forget to click on the animations when available!\*\*

***Bacteria Cells:*** <http://www.eurekascience.com/ICanDoThat/bacteria_cells.htm>

1. How is bacteria a part of recycling and biodegrading? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What are the five basic parts of bacteria? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Draw the basic appearance of all bacteria:

***Bacteria and Viruses***: <http://www.beyondbooks.com/lif72/2a.asp>

1. How many cells do bacteria have? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Describe and draw an example of the three shapes of bacteria:
   1. Cocci: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Bacilli: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Spirilla: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What are two ways bacteria can get food? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What is the process called when bacteria divide into two cells? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Watch the animation of the process and draw the steps it goes through as it divides.

***Bacteria Divide and Multiply***: <http://www.cellsalive.com/ecoli.htm>

1. How long would it take for 2 bacteria cells to divide and turn into 4 bacteria cells? \_\_\_\_\_\_\_\_\_\_
2. How come our planet is not covered with bacteria? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Types of Bacteria***: <http://www.lanesville.k12.in.us/lcsyellowpages/Tickit/Carl/bacteria.html>

1. Compare Archaebacteria and Eubacteria.

|  |  |
| --- | --- |
| **Archaebacteria** | **Eubacteria** |
|  |  |

1. What kind of substances do bacteria consume to get energy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the process of making energy from food using oxygen? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Viruses****:* <http://www.web-books.com/MoBio/Free/Ch1E3.htm>

1. What are the stages of the life cycles of viruses?
2. What are the structures of viruses made of? <http://www.ucmp.berkeley.edu/alllife/virus.html>
3. How was the first vaccine discovered? <http://www.thedorsetpage.com/history/smallpox/smallpox.htm>
4. What are retroviruses and give an example? <http://users.rcn.com/jkimball.ma.ultranet/BiologyPages/R/Retroviruses.html>

***Bacteria, Viruses, and Diseases*:**

1. How are bacterial infections treated verses viral infections? <http://www.netdoctor.co.uk/health_advice/facts/virusbacteria.htm>
2. How do bacteria become antibiotic resistant? <http://www.answersingenesis.org/articles/am/v2/n3/antibiotic-resistance-of-bacteria>
3. How do vaccines help fight diseases? <http://www.cdc.gov/vaccines/vac-gen/howvpd.htm>
4. List 5 diseases caused by bacteria. <http://biology.clc.uc.edu/courses/bio106/bact-dis.htm>
5. List 5 diseases that are caused by viruses. <http://www.noah-health.org/en/infectious/diseases/viral/>